

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "or the like" renders the claim indefinite because the claim includes elements not actually disclosed (those encompassed by "rubber-like"), thereby rendering the scope of the claim unascertainable. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patil et al. (US 5,070,284) in view of Takegawa (JP 62004937). Patil et al. teach an electromagnetic shock absorber comprising: a shock absorber body (104) which makes a telescopic motion in response to an input from outside; a bail screw mechanism which is arranged in the shock absorber body, converts the telescopic motion into a rotary motion, and is

composed of a ball nut and a screw shaft (106, 112); and a motor (104) which is provided coaxially with the shock absorber body and generates electromagnetic resistance to oppose against the rotary motion to be input into a rotary shaft of the motor, wherein the screw shaft and the rotary shaft of the motor are constituted as one united shaft member, wherein the shock absorber body has an external cylinder, and an internal cylinder to be slidably inserted into the external cylinder, and the motor is coaxially connected with an upper part of the external cylinder, wherein the ball nut of the ball screw mechanism is fixed to an upper part of the internal cylinder, and the screw shaft which is united with the rotary shaft of the motor is spirally engaged with the ball nut, wherein the screw shaft and the rotary shaft are connected by an intermediate shaft section which is rotatably supported by an inside wall of the external cylinder through a bearing, wherein a first cushion member which comes into contact with a lower surface of the ball nut at a maximum descent stroke position of the internal cylinder is installed at a lower end of the screw shaft, and wherein a second cushion member which comes into contact with an upper surface of the ball nut at a maximum ascent stroke position of the internal cylinder is installed at a lower surface of the bearing.

Patil et al. do not teach wherein a diameter of the intermediate shaft section is thinner than that of the screw shaft, and a diameter of the rotary shaft is thinner than that of the intermediate shaft section. Takegawa teach wherein a diameter of the intermediate shaft section is thinner than that of the screw shaft, and a diameter of the rotary shaft is thinner than that of the intermediate shaft section. (Figure 3)

Because both Patil et al. and Takegawa teach screw shafts, intermediate shafts and rotary shafts which are connected, it would have been obvious to one having ordinary skill in the art to provide the shaft of varying diameters as taught by Takegawa since the operation of the shock absorber is in no way dependent on the shaft diameters and one skilled in the art would have known to substitute one shaft for another to achieve the predictable result of reducing the number of components and production costs.

Patil et al. further do not teach wherein the first and second cushions are comprised of rubber. Yamaoka et al. teach rubber cushions (134-136, Fig. 8) used in shock absorbers. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make a cushion from rubber since rubber is well known for its elastomeric impact absorption properties.

Response to Arguments

4. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Torres whose telephone number is (571)272-7127. The examiner can normally be reached on Monday, 6:00 AM - 4:30 PM, Tuesday, 6:00 - 12:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571)272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MT
6/4/2008

/Melanie Torres/
Primary Examiner, Art Unit 3683